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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,082	05/22/2006	Thomas Huber	59482.21880	3687

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EXAMINER

O'HARA, BRIAN M

ART UNIT	PAPER NUMBER
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3644

NOTIFICATION DATE	DELIVERY MODE
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12/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

Office Action Summary	Application No. 10/565,082	Applicant(s) HUBER ET AL.	
	Examiner Brian M. O'Hara	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-31 is/are pending in the application.
- 4a) Of the above claim(s) 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10 and 18-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. The Final office action dated 08/12/2009 is withdrawn since use of the Vetillard et al. reference cannot be considered prior art under 35 U.S.C. 102(e).
2. New claims and amendments to the claims submitted on 12/02/2009 have been entered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation of "floor modules are attached to said longitudinal beams in such a way that substantially no forces acting in a longitudinal direction of said aircraft can be transferred from said floor module into said longitudinal beams." Use of the word "attached" in the above phrase renders the claim indefinite because it is unclear how anything can be considered attached and not transmit forces when forces are present. What structure is attaching the floor module to the longitudinal beams?

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 18-25 and 27-31, are rejected under 35 U.S.C. 102(b) as being anticipated by Helmner (US Patent 5,170,968 A).

7. **Regarding independent claims 18, 20, and 25,** Helmner discloses an aircraft comprising: a fuselage having an outer skin (shaded region of element 1); a cargo deck having an upper cargo bearing surface (155); comprising: a first support element/longitudinal beam (153) mounted to said fuselage (1) proximate to said outer skin (attaches rib, which is the unshaded portion of fuselage 1, as shown in Fig. 21); a second support element/longitudinal beam (153 on the other side of the aircraft); and at least one floor module (143) comprising a transverse support element (154) and at least one cargo deck floor element (155), wherein said transverse support element spans across an interior width of said fuselage (See Fig. 20) in a direction substantially perpendicular to a longitudinal direction of said aircraft, said transverse support element has a first end (as shown in Fig. 21) and a second (on other side of aircraft), opposite end, said first end is mounted to said fuselage solely via said first support element (153, as shown in Fig. 21), and said second end is mounted to said fuselage via said second support element;

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8. wherein at least one floor module having a first end and a second, opposite end, said floor module being configured and adapted to be mounted in said aircraft such that said first end rests on an upward-facing surface (top surface of 153 as shown in Fig. 21) of said first longitudinal beam (153) and said second end rests on an upward-facing surface of said second longitudinal beam (same on opposite side of cargo hold).

9. **Regarding dependant claims 19, 21-24, and 27-31**, Helmner further discloses at least one of said support elements is formed integrally with said fuselage (Element 153 is attached to 1 at the bottom of 153 as shown in Fig. 21);

10. the first and second support elements are mounted to said fuselage so as to extend in a longitudinal direction of said aircraft (cross section view of Fig. 21 is along longitudinal direction of the aircraft);

11. said first support element matingly receives said first end and said second support element matingly receives said second end (as shown in Fig. 21);

12. each of said first and second support elements (153) has an upward-facing planar surface (top surface shown in Fig. 21) and said transverse support element has a downward-facing planar surface (lower surface of 143a) at each of said first and second ends, said downward-facing planar surface at said first end supportably resting on said upward-facing planar surface of said first support element (As shown in Fig. 21);

13. transverse beam comprises at least two supporting feet (147) configured and adapted to be fastened to said fuselage (existing floor can be removed; See Column 16, Lines 1-12) proximate to a bottom central region of said aircraft (See Fig. 20);

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14. said at least one floor module has at least one transverse beam that spans across an interior width of said fuselage (spans cargo area in Fig. 20) in a direction substantially perpendicular to a longitudinal direction of said aircraft, and said transverse beam has a first end and a second, opposite end, said floor module being configured and adapted to be mounted in said aircraft such that said first end rests on said upward-facing surface of said first longitudinal beam and said second end rests on said upward-facing surface of said second longitudinal beam;

15. at least one floor module (143) is mounted to said aircraft in such a way that substantially no forces acting in said longitudinal direction of said aircraft can be transferred from said floor modules into said longitudinal beams (143 simply sits on top of 153); and

16. said transverse support element comprises at least one supporting portion (147) that extends to a bottom portion of said aircraft.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 1-4, 6-10, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmner (US Patent 5,170,968 A) in view of Fenner et al. (US Patent 4,780,043 A).** Helmner discloses a cargo deck for a cargo compartment (3) of an aircraft with an outer skin (shaded area of element 1), said cargo deck being adapted

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to receive loads and comprising a floor module (143), which is fixed within the cargo compartment and defines said cargo deck, and a plurality of longitudinal beams (31a including 153; one on each side of the aircraft) attached to said outer skin (via structure of element 1; non-shaded portion of element 1 as shown in Fig. 21) on which said floor modules are mounted (See Column 16, Lines 28), wherein said floor modules are attached to said longitudinal beams (153) in such a way that substantially no forces acting in a longitudinal direction of said aircraft can be transferred from said floor modules into said longitudinal beams (143 simply sits on top of 153 as shown in Fig. 21), but does not disclose a plurality of floor modules. Fenner et al. teaches a cargo area of an aircraft having a plurality of floor modules (19) which are disposed on longitudinal beams (107) which are attached to a major structural component (30). At the time of invention, it would have been obvious to one of ordinary skill in the art to provide the floor module of Helmner as a plurality of floor modules as taught by Fenner et al. The motivation for doing so would have been easily convert the aircraft between different types of cargo holds.

19. **Regarding claims 2, 4, and 6-8**, Helmner discloses a plurality of ribs (fuselage frame as discussed in Col. 3, Lines 25-35 inherently is composed of ribs), which are fixed to said outer skin (shaded portion of Element 1) and said longitudinal beams (153) are fixed to said ribs (see non-shaded portion of element 1 in Fig. 21, fixed to element 153); rapid closure elements (149); a pair of longitudinal beams (31a, as shown in Fig. 20); at least one transverse beam (154); and said transverse beam having at least one supporting foot (147).

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20. **Regarding claim 3**, Helmner discloses the rail element 31a but is silent on the material used. Longitudinal beams 31a would inherently have the same coefficient of expansion as the skin of the aircraft since it is rigidly attached to the fuselage. The rail 31a would need to expand with the skin and fuselage in order to keep the aircraft from ripping apart.

21. **Regarding claim 9**, Helmner shows in Fig. 21 element 31a adjacent to the aircraft fuselage (1). There is inherently some fixation element holding the longitudinal beam (31a) to the ribs (non-shaded portion of element 1).

22. **Regarding claim 10**, Fenner et al. discloses the plurality of floor modules (19) being decoupled from one another. At the time of invention, it would have been obvious to one of ordinary skill in the art to decouple the plurality of modules from one another in order to facilitate removal of the modules as taught by Fenner et al.

Response to Arguments

23. Applicant's arguments, see page 12 of remarks, filed 12/02/2009, with respect to the Vetillard et al. reference have been fully considered and are persuasive. The rejection of Claims 1-10 and 18-25 has been withdrawn.

24. Further, the amended claims filed 12/02/2009 have been entered.

25. Applicant's arguments with respect to claims 1-4, 6-10, and 18-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on Monday thru Friday 10am - 5pm except the first Friday of every Bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael R. Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yvonne R. Abbott/
Signing for Michael Mansen
SPE, Art Unit 3644

/B. M. O./
Examiner, Art Unit 3644